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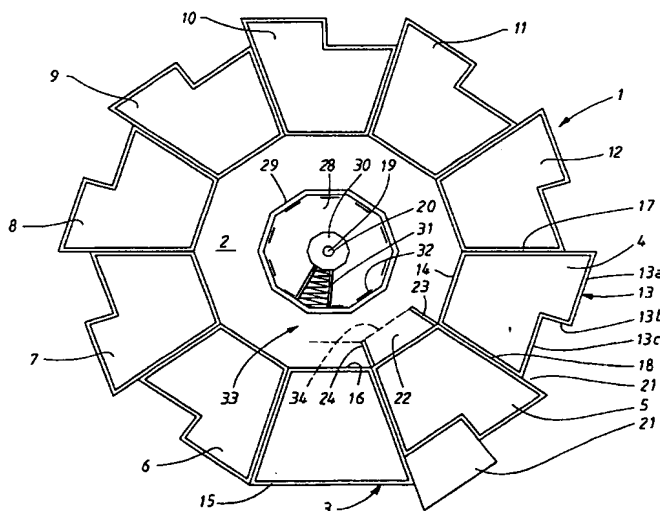
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(54) Title: BUILDING FOR A GROUP HOUSING FACILITY



(57) Abstract: Building for a group housing facility in the form of a building body divided into a housing section (1) with a number of housing units (4-12) and a common unit (2, 3). The building body is in its outer shape essentially symmetric around a standing central axis (19), for example with a circular or polygon shaped periphery, and exhibits a roof (25). The housing units are arranged as sectors in a ring-shaped peripheral section, that the common unit comprises at least a central common unit (2) arranged on the inside of the housing section. The central common unit comprises a centrally placed pool area with a central pool (28) and a common ring-shaped walking space (33) around the pool and between the pool and the housing units. The roof is light transmittable over at least parts of the common unit.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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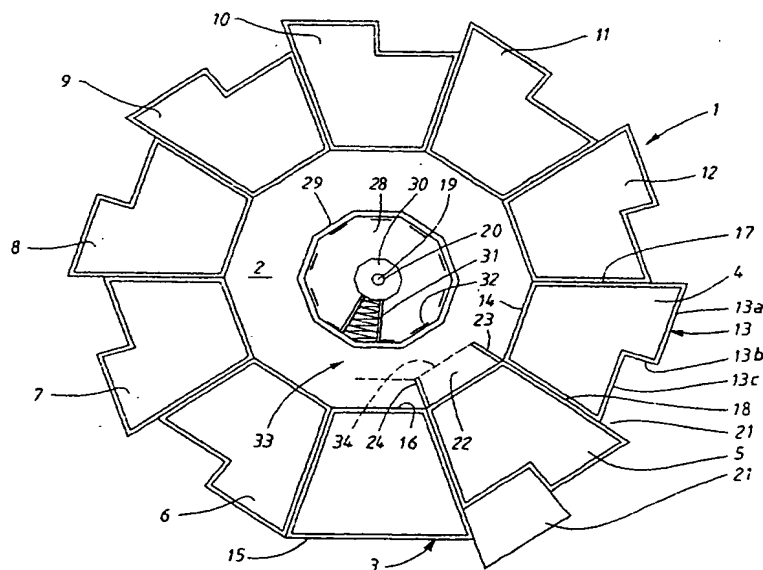
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(54) Title: BUILDING FOR A GROUP HOUSING FACILITY



(57) Abstract: Building for a group housing facility in the form of a building body divided into a housing section (1) with a number of housing units (4-12) and a common unit (2, 3). The building body is in its outer shape essentially symmetric around a standing central axis (19), for example with a circular or polygon shaped periphery, and exhibits a roof (25). The housing units are arranged as sectors in a ring-shaped peripheral section, that the common unit comprises at least a central common unit (2) arranged on the inside of the housing section. The central common unit comprises a centrally placed pool area with a central pool (28) and a common ring-shaped walking space (33) around the pool and between the pool and the housing units. The roof is light transmittable over at least parts of the common unit.



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## TITLE

Building for a group housing facility

## 5 TECHNICAL FIELD

The present invention refers to a building for a group housing facility according to the preamble of the subsequent claim 1.

## 10 BACKGROUND ART

Group housing facilities are previously known where the housing units or the apartments are arranged in a row and connected to common spaces, normally kitchen and multipurpose rooms, via a corridor. Hereby, most  
15 housing units include long corridors and thus long distances for all apartments not located close to the multipurpose rooms, especially if one wants to avoid multi-storey facilities. Facilities with apartments in a row normally creates an isolated living with limited contact with neighbours, especially in those cases where meals are not taken collectively.

20

## DISCLOSURE OF INVENTION

The object of the present invention is to eliminate the disadvantages with previously known group housing and to facilitate living together at the same  
25 time as the construction can be rational and be run in a rational and effective way.

Said objective is met by a building characterised in the subsequent claim 1.

## BRIEF DESCRIPTION OF DRAWINGS

The invention will in the following be described in an embodiment with reference to the appended drawings in which;

5

fig. 1 with a perspective view shows the building according to one embodiment,

fig. 2 shows a plan view over the building with the roof removed and

10

fig. 3 shows a perspective view of the building with the roof removed.

## MODE(S) FOR CARRYING OUT THE INVENTION

15 The building for a group or multi-housing facility comprises in its main part an annular housing section and a first common section 2 and at least a second common section 3. The housing section 1 extends in a ring-shaped manner around the central common section and comprises a number of housing units arranged in a circular manner, in the shown example nine housing units 4-12

20 which in turn are divided into a number of rooms and kitchen and also bathroom. The housing units are delimited outwardly and inwardly respectively by, on one hand, an outer wall 13 and, on the other hand, by an inner wall 14. The outer walls 13 of the housing units together form the common outer wall for the building together with the outer wall 15 of the

25 common section 3. The inner walls 14 of the housing units analogously form a common continuous inner wall together with the inner wall 16 of the second common unit. Every housing unit 4-12 is separated from a neighbouring unit by a partition wall 17, 18 extending radially from a standing symmetric axis 19 for the building, where a load-bearing pillar 20 extends vertically in order

30 to support the roof construction of the building together with the walls. The inner walls of the housing section facing the central common unit 2 together form a ring-shape, in the shown example a polygon since the inner walls are

straight, alternatively the walls may be bent forming a circle or cylinder shape. In the shown example, the outer walls are divided into three wall parts 13a, 13b, 13c arranged such that a protected niche for a patio 21 is formed, which consequently is open outwardly and forms a first climate zone or  
5 leisure area in the facility.

An inner yard 22 is preferably arranged towards the first common section 2 at the inside of the housing section 1 or, more exactly its inner wall 14, and which is arranged as a "patio" with screen walls 23, 24 between every inner  
10 wall 14 of the housing, but situated under the roof 25 of the building which exhibits a light transmittable part 26 over the common unit 2. The roof is divided into sector shaped "sector parts" and exhibits openable window units 27, in the shown example at a central part of the roof. As an alternative, the entire roof may be conical with convexly curbed roof surfaces.

15

A swimming pool 28 is symmetrically arranged around the pillar 20 in the common section 2, which thereby is common for all the residents in the facility and their guests. The pool 28 may be circular or more exactly cylindrical, or as in the shown example formed with a polygon shaped edge  
20 29. The swimming pool is advantageously lowered in relation to the base level of the building, i.e. the floor level for the housing section and the common unit. A section that rises above the water surface may be arranged centrally by the pillar, which forms a small island 30 around the pillar. The section above the water surface may give room for plants or persons that  
25 may stand or sit on the island. A bridge 31 may extend over the water to the island. Just in front of every apartment each apartment proprietor may have his/her own bathing ladder and his/her own pool edge section 32 just in front of their housing. Between every yard place 22 and the pool a ring-shaped walking space 33 is created accessible for all. This walking space 33 need  
30 not be delimited towards the yard place 22, but a small ledge or fence may be used as a demarcation if desired.

Additional details may be an open fire stove 35, 36, 37, 38 which may be common for two housing units, where every unit has one fireplace in the housing and one facing the yard place, wherein four fireplaces thus have a common flue and chimney.

5

Except for the above mentioned first outer climate zone for the residents, there is a second climate zone or leisure area for each housing unit which may be controlled individually regarding climate, and also a third climate zone for the central common unit 2, i.e. the inner yard with the pool. Even the semiprivate sphere with the yard places 22 belongs to the third climate zone, which advantageously may be held at a lower temperature level, but with a higher degree of humidity of the air than in the housing units. The climate is thus controlled with respect to at least temperature but advantageously also to the humidity of the air.

15

The entire inner yard may thus in its basic design be a common third climate zone, but may still be regarded as divided into three leisure areas, namely the semiprivate yard places 22, the walking space 33 and the pool 28. Each of these leisure areas may be controlled separately in respect of the climate, e.g. by IR-radiation equipment.

20

The third common unit 3 may comprise one or a number of sectors corresponding to the housing units, with a, in the shown example, plane outer wall 15 without a niche. Advantageously, the walls of the common unit, as shown in fig. 3, may be arranged with gates 35, 36 that allows service vehicles to drive in to, and through the central common unit, for example for pool service, but also for rescue vehicles. A second common unit 3 may comprise installations and other service equipment, heat device for warm-up of the rooms as well as the pool water, common storage spaces, space for leisure-time activity, kitchen and common dining room, wherein more than one such sector may be used as a common area.

25

30

Moreover, in the walls of the housing units windows 37 and doors 38 are arranged, and towards the central common area 2 advantageously large glass surfaces 39.

- 5 With the building according to the invention, a group or a multi-housing facility may thus be created, where all the residents have close access to the common areas without the formation of long corridors. By the formation of a inner yard under roof with pool, the residents may, by their own desire, choose their degree of solitude and number of climate zones or leisure areas,  
10 where the yard place 22 forms an intermediate step of solitude.

The invention is not limited to the above described and in the drawings shown embodiments, but may be varied within the scope of the subsequent claims. For example, the housing units may have different form and portions  
15 and the common units may be inserted on several locations along the ring of housing units. The outer walls need not be formed with niches where the outer door is arranged on the end wall. The building may be erected as a one-storey house or a two-storey house. In the case of more than one storey, stair lifts or alone standing lifts may be arranged for the disabled, for example  
20 on the inside of the housing towards the inner yard, alternatively on the outside of the building. The building may advantageously be manufactured in the form of modules that in a larger or lesser extend may be pre-fabricated in a plant in order to further be assembled on location. The beneficial interest may advantageously be in the form of tenant-owners' apartments or in the  
25 form of rental apartments. The roof may in one step be raised in its central part, e.g. such that the roof over the common unit 2 is raised. Between both roof parts is hereby formed a wall part running around the roof, that may be completely or partly fitted with glass. The inclination of the roof may be different between the different parts.

## CLAIMS

1. Building for a group housing facility in the form of a building body divided into a housing section (1) with a number of housing units (4-12) and a  
5 common unit (2, 3), characterized in that the building body in its outer shape is essentially symmetric around a standing central axis (19), for example with a circular or polygon shaped periphery, and exhibits a roof (25), wherein the housing units are arranged as sectors in a ring-shaped peripheral section, that the common unit comprises at least a central  
10 common unit (2) arranged on the inside of the housing section, that the central common unit comprises a centrally placed pool area with a central pool (28) and a common ring-shaped walking space (33) around the pool and between the pool and the housing units, and that the roof is light transmittable over at least parts of the common unit.
- 15 2. Building according to claim 1, characterized in that the ring-shaped peripheral section comprises a second common unit (3).
3. Building according to claim 1, characterized in that a shielded  
20 yard place (22) for every housing unit (4-12) is arranged toward the central common unit (2).
4. Building according to claim 1, characterized in that patios (21)  
25 are arranged on the outside of the building.
5. Building according to claim 4, characterized in that the outer wall  
(13) is partly retracted in order to form a patio under roof for every housing unit (4-12).
- 30 6. Building according to claim 2, 3 and 4, characterized in that the building is divided into a number of leisure areas that are positioned in a ring-shaped manner around the central axis (11), namely a radially outer first

leisure area with the patios (21), a second leisure area with the housing units (4-12) located radially on the inside of these, a third leisure area with the yard places (22) placed radially on the inside of the housing units, a fourth leisure area with the ring-shaped walking space (33) placed on the inside of these  
5 and also a centrally located fifth leisure area with the pool (28) that extends around an island (30) from which a central pillar (20) extends along the central axis (19).

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 03/01024

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: E04H 1/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: E04H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 19509111 A1 (SCHÄFER, HANS-JÜRGEN), 25 July 1996 (25.07.96) --	1-6
A	DE 19917302 A1 (KRENNLEITNER, FRANZ), 26 October 2000 (26.10.00) --	1-6
A	FR 2087272 A (SOCIETE FRANCAISE DE CONSTRUCTION ET AL), 31 December 1971 (31.12.71) --	1-6
A	US 6360496 B1 (RACCUGLIA), 26 March 2002 (26.03.02) -----	1-6

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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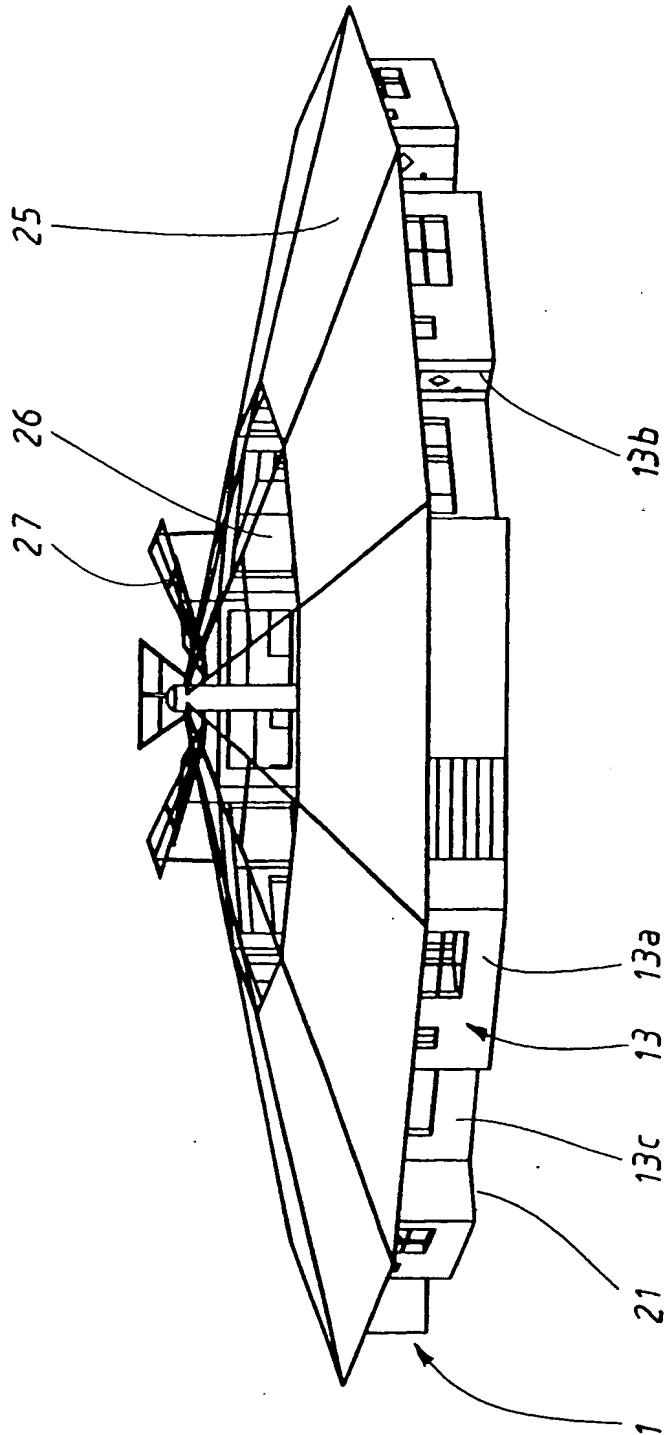
International application No.

PCT/SE 03/01024

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
DE	19509111	A1	25/07/96	NONE	
DE	19917302	A1	26/10/00	NONE	
FR	2087272	A	31/12/71	DE 2123166 A IT 955050 B	02/12/71 29/09/73
US	6360496	B1	26/03/02	NONE	

1/3

FIG. 1



2/3

